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**“Fat Man”:
Modern Nuclear Thought on a Tactical Weapon, 1970-2005**

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**Seminar Paper
Presented to the Department of History
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In partial fulfillment of
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Preface

The Hiroshima and Nagasaki bombings are incredible events in human history that were grand both in their destructive force and effect on the world. The way they influenced the course of world politics and militarism is profound for its change in the dynamics of international relations. They remain controversial events in history that are often hard to discuss or relate to the modern world. Take the case of Tsutomu Yamaguchi as an example. He carries a unique and horrible honor of having lived through both bombs. On August 6th, 1945 he was in the city of Hiroshima, Japan on business when the first atomic bomb, “little boy,” was dropped to inflict the single most devastating tactical blast in history, till that point. After enduring a night of agony from serious burns he received from the Hiroshima bombing, he returned to his hometown of Nagasaki to recuperate. Upon returning, Tsutomu lived through the second atomic bomb of World War II and the last use of nuclear arms in war. However, he was only officially recognized by the Japanese government and international community as surviving both bombs on March 25th, 2009. His story is just one instance of how the world is only starting to define the role the bombs play in a modern context.¹

Introduction

The two bombings at Hiroshima and Nagasaki are often connected as a single point in history because the world continues to view both bombs as necessary to the ending of the Second World War as. Modern historians are only starting to question this connection between the bombs as a single, ending event. They focus on changing how the bombs are perceived, particularly the use of “Fat Man” on Nagasaki. Revisionist history

¹ Justin McCurry, “A Little Deaf In One Ear – Meet the Japanese Man Who Survived Hiroshima and Nagasaki,” *The Guardian*. March 25, 2009, p3.

of the bombing of Nagasaki exposes how this event set precedents for many of the controversies that surround modern nuclear policy, from uncontrollable nuclear war to the bombing of civilians. Modern historians examining the bombing of Nagasaki now question the bombs use as defined by social memory and the work of other intellectuals and historians who affirm the story of Nagasaki. This questioning reveals how the Nagasaki bomb greatly influenced the development of military policies despite little knowledge of the bombs power or effects. Their work shows how the bomb set the difficult precedent that it is justifiable military and scientific practice to use untested weapons in real combat. They show how work on the Nagasaki bomb entangled and blurred the lines between scientific study and military action. Also, the Nagasaki bomb shaped the development of using nuclear weapons as political tools in modern international politics with policies like deterrence and brinkmanship that developed around nuclear arms. Modern examination of the bomb shows how it's status as an historical event is in flux as the reasons for its use are questioned by emerging scholarship.

Section I: The Official Narrative v. Revisionist History

The historiography surrounding the two bombs has slowly changed in the modern interpretation of WWII because of the striking differences in the bombs and how they relate to modern policies surrounding nuclear weapons. Hiroshima is a unique event for its flawless execution, designation as “a first,” and undisputed role in shifting the feeling of World War II.² Hiroshima's favorable a place in world history, while disputed, is characterized as a favorable event in history and is often favored in historical scholarship.

² Michael D. Gordin, *Five Days In August: How World War II Became a Nuclear War*, (New Jersey: Princeton University Press, 2007): 81.

As Frank Chinnock writes in the preface to Nagasaki: The Forgotten Bomb a collection of personal accounts of the bombing: “Two bombs, two very special bombs, have been dropped on people in our lifetime. The first at Hiroshima has been the subject of books, articles, movies, editorials, crusades. The Nagasaki bomb, anticlimactic as it must have seemed, has been ignored by the world, virtually forgotten.”³ The bombing of Hiroshima receives far more attention because historians can write about that bombing with stronger favor because it lacks many of the moral controversies that surround Nagasaki. It is extremely difficult to question the accepted or official narrative of the atomic bombings because there is such a strong, structured narrative that surrounds the Second World War.

Questioning or examining the events of the Second World War is incredibly difficult for modern historians because there remains such a strong social and intellectual narrative of the events. Theodore Prosise identifies this official narrative that makes examining the events of WWII so difficult in The Collective Memory of the Atomic Bombings Misrecognized as Objective History:

Furthermore, although public opinion regarding the attacks is not uniform, only one historical narrative prominently informs American public history of the event. This “official” narrative embeds a powerful account of the event within the metanarrative of “the good war.” In this official account, good and evil are clearly defined: The bombings were necessary to end the war quickly and to save American lives; Truman’s decision was a military one intended to save American lives because without the atomic attacks the U.S. would have had to invade the Japanese home islands; and the Japanese were fanatics who would fight to the bitter end rather than surrender. The dropping of the bombs was the closing act in America’s victory over fascism and imperialism.”⁴

³ Frank W Chinnock, *Nagasaki: The Forgotten Bomb*, (New York and Cleveland: The World Publishing Company, 1969) ix.

⁴ Theodore O. Prosise, “The Collective Memory of the Atomic Bombings Misrecognized as Objective History: the Case of the Public Opposition to the National Air and Space Museum’s Atom Bomb Exhibit.” *Western Journal of Communication*. 62:3 (Summer 1998): 317

An incredible cultural perception of both bombs as necessary to the end of the “good war” because of the war’s deep effect on the American public and the bombs’ role in ending that war. The nuclear bombs are seen as having saved the lives of countless Americans lives in a war that affected or touched nearly every person in society.⁵ It makes the separation of the two bombs and questioning the necessity of the nuclear bombs very difficult which also makes it hard to relate the bombs to modern policies. However a “revisionist” history, or history that challenges this official narrative, has emerged to directly question the Nagasaki bombings “necessity” to ending the war.

Revisionist history questions most parts of the official narrative of the Nagasaki bomb increasing the controversy that surrounds the use of Fat Man on Nagasaki. For instance, revisionist history questions one of the strongest reasons the bombs are connected in social memory and the official narrative of the good war. As Michael Gordin notices in his book Five Days In August: How World War II Became a Nuclear War how revisionist history views the timing of the bombs when he states, “The issue of the close spacing between the two bombs has sparked long debate over whether or not this second bomb was “necessary” to end the war, a claim much more widely debated than the explosion of the first bomb over Hiroshima.”⁶ Revisionist history isolates the bombing of Nagasaki as unique because of the timing of the bomb which directly questions the reasons behind its use. This questioning magnifies the controversy that surrounds the Nagasaki bomb especially in the development of military policies surrounding the nuclear bombs.

Section II: A Clueless Military

⁵ Gar Alperovitz; Sanho Tree; et al. *The Decision To Use The Atomic Bomb*. (New York: Vintage Books, 1996), 423-24.

⁶ Gordin, 90.

The official narrative grants more trust in the military actions of the bombing of Nagasaki while revisionist history directly questions how the bombs were used as tactical weapons. Michael Gordin observes that new history on the atomic bombs directly questions the militaries use of the bombs, "...most Americans believe the reason the United States dropped *two* bombs on Japan is that the government knew in advance that two would suffice. The days up to surrender prove this supposed military omniscience to be nonexistent."⁷ Revisionist history directly questions the extent of how familiar the military was with the atomic bombs in direct opposition to the social belief that the both bombs were necessary to forcing Japan to surrender. It exposes a lack of military knowledge on the strongest weapon they had and shows how assumptions about the bomb shaped military policy in and after the Second World War. These assumptions that atomic weapons were useful tactical or "ordinary weapons" would shape subsequent policies concerning the atomic bombs use, policies that would not be questioned till modern examination of the bombs.

It is unfortunate that the military had so little knowledge of the actual force and effects of the atomic bomb in how powerfully destructive it was because the Nagasaki bomb was then used in without real knowledge of it's power and military policies developed with the same lack of knowledge. Military commanders still viewed the use of atomic bombs as a way to wipe out whole armies or clear whole parts of land for invasion after WWII, like slash and burn methods used to clear densely forested lands for farming. For instance General Leslie Groves insisted that after only thirty minutes when the atomic bomb was detonated that a military invasion force could move into an area and

⁷ Ibin, 7.

that such a force would be protected about six miles away from the blast.⁸ Military and civilian leaders could not fully appreciate the destructive force and poisons nature of the bombs causing them to incorrectly form policies around its use and use it on Nagasaki. For instance, had the military followed Groves's assumptions, a military force six miles away might have been damaged because Japanese records found that the force of the explosion broke glass nearly 19 miles from the center.⁹ Additionally, the radioactive and poisonous nature of the atomic bomb would never allow for the militaries kind of use in an area without endangering its soldiers.

The specific untested nature of the effects of nuclear radiation and nuclear bombs is a clear oversight by scientists and military strategist that is not adequately reflected until modern policies of nuclear weapons of are formed. The poisonous effects of the bomb that followed their blasts were largely unexpected because of limited testing of the new technology at the time. Gruesome descriptions of Dr's inability to treat victims of the atomic bombs are common in the personal accounts of the atomic bombings.¹⁰ It is clear that the nuclear bombing of Japan that became the first test case of these negative results to the body which lead to modern understandings of the long lasting detrimental genetic and cancerous effects of nuclear radiation.¹¹ This lack of knowledge shaped the nuclear policies of countries at the highest levels of government creating the potential for catastrophic nuclear war in the world because world leaders and countries embraced such policies as brinkmanship without full understanding of nuclear weapons.

⁸ Barton J. Bernstein, "Eclipsed by Hiroshima and Nagasaki: Early Thinking About Tactical Nuclear Weapons." *International Security*. 15:4 (Spring 1991): 161.

⁹ Ishikawa, 62.

¹⁰ Chinnock, 69-72.

¹¹ Eisei Ishikawa and David L. Swain, trans. *Hiroshima and Nagasaki: The Physical, Medical, and Social Effects of the Atomic Bombings*. (New York: Basic Books Inc., 1981) 364.

Section III: The Nuclear Bombs Political Roles

Fat Man use on Nagasaki is the closest example to what modern nuclear warfare in its devastation or escalation might look like today and its changing perspective in history connects with modern policies. Some dismiss the context of both Hiroshima and Nagasaki's relation to modern day policy even if the history around it shifts. Jack Kugler argues in Terror without Deterrence: Reassessing the Role of Nuclear Weapons that the bombing might play no role in modern policies of deterrence: "By itself, the absence of congruence among the many factors that lead to massive bombing of Hiroshima and Nagasaki provides little evidence for or against nuclear deterrence."¹² The modern world has significantly changed from the time and technology of WWII but that does not change that the challenging of the official narrative of Nagasaki connects it with modern policies. For example, the modern policy of using the atomic bombs as a deterrence or political tool directly comes from revisionist history questioning of the reasons the bombs were used.

Revisionist history focuses on how the bombs were used for political reasons because the accepted narrative relies on a strong construction of necessity and military planning to justify much of the controversy surrounding the bomb. This questioning reveals how the bomb was used for more political reasons and has set a modern precedent of using the bombs as political tools. There is significant evidence to support the idea that the atomic bombs were used for their desired political effects on the U.S.S.R.¹³ At the very least, actions of President Truman in consultation with his top advisors, attitudes of

¹² Jacek Kugler, "Terror without Deterrence: Reassessing the Role of Nuclear Weapons." *The Journal of Conflict Resolution*. 28:3 (Sep. 1984): 472.

¹³ Sadao Asada, "The Shock of the Atomic Bomb and Japan's Decision to Surrender: A Reconsideration," *The Pacific Historical Review*. 67:4 (November 1998):, 478-9.

the scientists, Truman's interactions with Stalin concerning the bomb, and the scientists attitudes concerning the bombs all reflected fears of or the bombs effects on the Soviet Union and played a part in the use of the atomic bombs. Considering the political effects when using the bombs would set a precedent that nuclear arms could be used as political tools in what Gar Alperovitz has dubbed *Atomic Diplomacy*.¹⁴ This precedent of atomic diplomacy created by revisionist writings has a direct link to modern policies especially their roots in the Cold War and its political development.

During the Cold War nuclear arms were expanded on policies that perceived them as an important political tool as the bombings of Hiroshima and Nagasaki demonstrated revisionists discredit the necessity of Nagasaki particularly. As William Walker pointedly observes in *Nuclear Order and Disorder*, "Hiroshima and Nagasaki brought an immediate appreciation of nuclear technology's unique ability to destroy and to mutilate. But by appearing to have hastened the end of a great war, the atomic bomb was attributed and exceptional power of persuasion...."¹⁵ As he sees it the bombing of Nagasaki for the political reason of demonstrating the power of nuclear weapons demonstrated to other countries that nuclear arms are necessary for strong international political clout. The political implications of using the bombs as deterrence to the emerging Soviet Union resulted in the view of other countries to embrace deterrence as a policy.¹⁶ Additionally, nuclear weapons are the strongest military weapon a country can achieve making it a desired weapon. David Holloway points out this perception in his article "Entering the Nuclear Arms Race: The Soviet Decision to Build the Atomic Bomb, 1939-45" when he

¹⁴ Alperovitz, 125-185

¹⁵ William Walker. "Nuclear Order and Disorder." *International Affairs*, 76: (Oct. 2000): 704-708. Walker, 207.

¹⁶ Ibin.

states, “The military rationale for the atomic bomb was simple, and not specific to any particular military doctrine: atomic energy would provide unprecedented large explosive force.”¹⁷ Revisionist history points out how the atomic bombing of Nagasaki was not “necessary” to save lives but was instead viewed as a political and military demonstration of power to the Soviet Union.

Other countries in developing modern nuclear policies would use the precedent of the Nagasaki bombings that set up atomic weapons political tools and would lead to uncontrolled escalation of nuclear arsenals. America’s use of the two bombs, especially ending with Nagasaki, started a strong arms race in the Cold War that encompassed many reasons for achieving nuclear power in the modern era. As Gordin furthers of modern nuclear power: “We live with atomic bombs in their “post surrender” form not just in terms of the debate over the moral justification of the atomic bombings but multiple other aspects of nuclear thinking.”¹⁸ In WWII, Hiroshima and Nagasaki bombs were justified by the need to achieve and end to the war and surrender of Japan. In a “post surrender” form the moral justifications and even more aspects of nuclear power are questioned because the context of WWII does not automatically validate them any more. For instance, revisionist rethinking of the Hiroshima and Nagasaki bombings shows how they played a significant role in how the Cold War was waged and continue to play a role in modern nuclear policy as their moral justification continued or changed.

Hiroshima and Nagasaki undoubtedly ended the war but their moral justification expanded the nuclear arms race during the Cold War which is directly rooted in the view of nuclear weapons as necessary to international power like the U.S. used nuclear

¹⁷ David. Holloway, “Entering the Nuclear Arms Race: The Soviet Decision to Build the Atomic Bomb, 1939-45.” *Social Studies of Science*, 11:2, Theme Issue: Soviet Science (May 1981): 163.

¹⁸ Gordin, 7.

weapons. Cold War policies reflected a need for the “big two,” the United States and the Soviet Union, to check each other’s power by escalating the arms to race to deter the other and always stay on the brink of war. American in particular championed its “nuclear primacy” in the world while it had monopolies on nuclear power to signify its international political power as the strongest country.¹⁹ The effects of the bombing of Nagasaki in shaping this policy of the Cold War created a race to further the scientific study of nuclear power for militarism.²⁰ After Nagasaki had been perceived as a use of the nuclear weapons as a political ploy or tool nuclear arms became the means by which countries exercised dominance over each other.

The most important role in the shaping of nuclear policy as an international political tool has been by world leaders because of the perception from the official narrative of Hiroshima and Nagasaki that Truman played a significant role in the ordering of the bombings. Much is made of President Truman’s own grappling of the moral, political, and social implications of the bomb’s use in revisionist history and how it relates to modern nuclear policy.²¹ Michael Gordin points out how the official narrative is not often questioned because of hard it is to determine is personal feelings, “...how are we to determine the private intentions and thoughts of a public figure, concerning which the documentary evidence is lacking, misleading, or retrospective?”²² It is difficult to discern what President Truman was personally thinking but revisionist history exposes much of his misunderstandings and feelings about the bombs and how modern nuclear policies so rapidly developed with the same misunderstandings.

¹⁹ George H. Quester. *Nuclear Diplomacy; the First Twenty-Five Years*. (New York: Dunellen Co, 1970) 9-18, 67-69.

²⁰ Ibin, 1-8.

²¹ Burnstien, 1991, 547-559.

²² Gordin, 142

Since the destruction of Nagasaki that nuclear policy is shaped by pre-planning and the work of scientists and military structure that treat leaders as only a partial check, an idea not inconsistent with Truman's role in the original atomic bombings as revisionist historians find. As Gordin concludes of Truman's role in the decision to drop the bomb, "That is, dropping the atomic bomb was an established assumption from before Truman took office and was not seriously questioned until after the destruction of Hiroshima."²³ It is a persist idea from revisionists that Truman had actual little control over the dropping of the bomb because other forces, even their own existence, propelled the bombs use and not his personal decisions as an international leader. This reflects modern nuclear policies where one action by a leader inevitable creates a cascade of actions by others in the way that nuclear policy has developed because the original nuclear arms were so readily used at Hiroshima and Nagasaki.²⁴ It is wrong to think that there is a single button that launches a nuclear missile. This can be seen in Truman's own order to drop the bomb, not written by him, that left considerable decision making power up to others, especially in sections 1 and 2 of the order.²⁵ It is a consistent theme that there is no one person who has or now safeguards nuclear power in modern nuclear policy which connects to revisionist options that Truman did not control the use of either bomb, especially Nagasaki.

The lack of control Truman had over the use of atomic weapons in WWII and the growth of atomic weapons is exemplified by the modern event the Cuban Missile Crisis. There are deep parallels between the need to use the bombs on Hiroshima and Nagasaki

²³ Ibid.

²⁴ Quester, 218.

²⁵ Official Bombing Order, July 25, 1945. Atomic Bomb: Decision; Documents on the Decision to Use Atomic Bombs on the Cities of Hiroshima and Nagasaki. <http://www.dannen.com/decision/handy.html>.

without a strong role by Truman and the role of Kennedy in a crisis that nearly lifted out of the control of international leaders would have brought the world to nuclear war through an uncontrollable chain reaction of nuclear action and retaliation. Revisionist history even reveals how science played a powerful role in shaping the development of nuclear power for militarism and political action that would last all through the modern age in policies like brinkmanship and deterrence.

Section IV: A Scientist's Role in Nuclear Policy

Revisionists point out how scientists themselves played a role in furthering the uncontrolled nature of nuclear weapons because the scientific study of nuclear power during the war made the creation of nuclear arms inevitable. The discovery of nuclear fission and other principles and technologies that would shape the world began as a long process with theories dating back to as early as the late 1800s. A long line of scientific contribution, collaboration, and initiation would fertilize the rich discovery of the war period with all the tools need to create the bomb.²⁶ After the discovery of all the necessary puzzle pieces for nuclear fission, the actual process of the atomic bomb would be discovered in 1938 in Germany. Nine months later, German forces under the command of Nazi leaders would invade Poland. The scientific discovery of nuclear fission, in essence the atomic bomb, was considerably shaped by the war moving scientific focus away from other forms of nuclear power²⁷ Revisionist point out this key innovation occurring in a period of war and, from an American perspective, behind enemy lines would only have accelerating effects developing nuclear arms.

²⁶ Martin J. Sherwin. *A World Destroyed: The Atomic Bomb and the Grand Alliance*. (New York: Knopf, 1975) 14-17.

²⁷ Holloway, 159-171.

Modern policies on the scientific development of nuclear arms continue down a road of escalation to further deterrence and brinkmanship with stronger bombs because the early scientific discovery of nuclear power occurred in war and focused on the military application of nuclear power. Early on some scientists felt that nuclear power might never be controlled or that if it could its applications would be in propulsion or generating electricity.²⁸ H.G. Wells captured the diverse thinking of the potential for nuclear energy in his 1914 novel *The World Set Free* in which nuclear power both benefits the modern world and lays it to waste in a devastating nuclear war. His book was inspired by the work of British Physicist Friderick Soddy from 1903 that looked at the release of large amounts of atomic energy.²⁹ However, practical application of this could not be seen until the physical development of this technology which rapidly developed in a time of war when research money was more accessible to projects concerning the war. Revisionist history focuses then on how the nuclear arms projects were motivated by the accessibility of money to nuclear development through military research. This early merging in WWII would link scientific study and military application in an enduring structure that lasts until modern times.

The relationship between scientists and military for this project often differed because of different goals and styles of communication. Modern controversies over secret nuclear programs developed from the incredible successful program the United States government used to create the original atomic bombs. Revisionists identify this in how military command often classed with scientific needs for the scientific process. Specifically, the military emphasis on compartmentalization and secrecy meant other

²⁸ Sherwin, 13-16.

²⁹ Diehl, 3.

scientists often didn't know what other scientists on the project were working on or how far they'd progressed.³⁰ Production of the Fat Man for strategic use is profoundly shaped by the conflict between military needs of secrecy and scientist wants for greater testing. The prevailing secrecy of the atomic bombs created a standard of secret nuclear projects that have become contentious in modern nuclear policies. Countries like Iraq, Iran, North Korea, and others are condemned for secret nuclear projects in a modern era that recognizes the potential they have for creating another Nagasaki. Resolving this controversy may require a greater change in the official narrative of the atomic bombs whose creation is still celebrated as wildly successful because of a focus on weapons research at the time.

The nuclear project began only two months before the Japanese attack on Pearl Harbor and progressed slowly as military goals and scientific process were fully merged. The United States did little early to develop nuclear technology even with the urging of scientists. As the war dragged on the U.S. partnered with Britain to explore the technology more and eventually created the means to create the bomb. President Roosevelt first created the *ad hoc* Uranium Committee for early experiments and the Briggs Committee for formation of nuclear policy. Only after the creation of the National Defense Research Committee, with the availability for more money to weapons research, and the development of Otto Frisch and Rudolph Peierls studies of the theoretical "superbomb" did the project move forward more.³¹ The early work of the committees was scattered and unfocused. The role of immigrants work (Frisch and Peierls) played a

³⁰ Sherwin, 59.

³¹ Ibin, 34.

major role in the development of the bombs because of the lack of focus.³² It would only be after the creation of a comprehensive nuclear project that nuclear weapons would be developed. The importance of scientists to the development of military nuclear technology is profoundly shaped by the experience of WWII because of this initial merging. Revisionist history reveals how the focus on military application of the technology led to the eventual development of the bombs and their use of Nagasaki. In fact, much of this drive to develop nuclear weapons didn't come from the military project but because of the scientists involved in it.

Eventual development and use of nuclear weapons would come not with the early work of the committees in the United States, nor would it come with the research of a vast amount of scientists, most foreign to the United States. The creation of nuclear weapons technology is a direct amalgamation of military and scientific work in the powerful Manhattan Project. History shows that this project directly led to the development of the bombs and their use; brought together the scientists and military structure to build the bomb in a partnership that is reflected in modern times. As Martin Sherwin writes of the Manhattan projects goals: "...all those associated with the enterprise [The Manhattan Project], military and civilians alike, agreed that the bomb's rapid development was the single most important necessity of war."³³ In this context the "necessity of war" meant the continuing war against Germany who the members of the project felt they were racing against for the technology.³⁴

A particular focus of revisionist history is how the scientists were driven by motives to use the bomb against Germany but that its surrender made that impossible but

³² Alperovitz, 185-191.

³³ Sherwin, 41.

³⁴ Ibin, 23

the project still progressed even when the scientists removed their support. The militaristic application of nuclear power can be traced back to suggestions and work of scientists displaced from Europe by the actions Nazi Germany such as Albert Einstein and Leo Szilard. Currently considered one of the main reasons for the creation of the military use of nuclear power, Albert Einstein's 1939 letter to then President Roosevelt, written by Leo Szilard, talked about the new military potential of nuclear technology and racing against Germany to discover that power. As the letter talks about the discovery of nuclear fission, "This new phenomena would also lead to the construction of bombs, and it is conceivable...that extremely powerful bombs of a new type may thus be constructed."³⁵ It was delivered to the president only 6 weeks after the outbreak of the war in Europe. Although many other countries had initiated nuclear projects, it was an incorrectly perceived race against the German project that scientists focused on in the early development of the project.³⁶ For historical purposes the main stimulus for developing nuclear weapons was their eventual use to smash German military forces spread across Europe. Scientists were not able to change or stop the use of nuclear arms on Nagasaki after the targets shifted because of Germany's surrender.

Scientists played a pivotal role in the implementing of nuclear technology in modern nuclear policy because of the role they played in the original development of nuclear technology. However, they too lack any control because of the precedents set by the atomic bombing of Nagasaki because of the precedent it sets in the uncontrolled use of nuclear weapons. Simply because of their existence nuclear weapons were used and even the withdrawal of the scientists support couldn't stop the bombing of Nagasaki.

³⁵ Diehl, 218.

³⁶ Sherwin, 18-22.

Albert Einstein would say after signing the letter written by Leo Szilard, “I made one great mistake in my life when I signed the letter to President Roosevelt recommending that atom bombs be made, but there was some justification – the danger that the Germans would make them.”³⁷ Einstein only wanted the bombs to be used against Germany but even his withdrawal of support did not stop the use of the bombs. Additionally, Leo Szilard would say in when asked if he opposed the bombing of Japan, “I opposed it with all my power, but I'm afraid not as effectively as I should have wished.”³⁸ The bombing of Japan was clearly not supported by the scientists who first conceived of nuclear weapons and urged their creation. Clearly the development of nuclear arms in a time of war created a perception lasting through modern times that nuclear weapons are necessary weapons that should be used no matter the opposition.

Opposition to the bombings could not stop them because revisionists note that nuclear weapons were now the key to getting Japan to surrender as they evaluate the official narrative of the bombings. As Gordin sees it, “Millions of Americans have been taught the history of the atomic bomb as if it were self-evident, from the beginning, that nuclear weapons would *by their very nature* compel the Japanese to surrender.” He points out that, “We are so familiar with such announcements of the transformation of the world through the nuclear blasts at Hiroshima and (although far less invoked) Nagasaki that the claim seems to us natural beyond question.”³⁹ The current history of the Hiroshima and Nagasaki bombs teaches that because of what they were and that they were needed they ended the war, though Nagasaki is less emphasized. However, revisionists question the

³⁷ Ibin, 27.

³⁸ Leo Szilard, Interview: "President Truman Did Not Understand." Atomic Bomb: Decision; Documents on the Decision to Use Atomic Bombs on the Cities of Hiroshima and Nagasaki.
<http://www.dannen.com/decision/handy.html>

³⁹ Gordin, 6.

necessity of the Nagasaki bombing because it seems unnecessary in this context. In fact, looking back now historians find that there were many ways to have ended the war with Japan in such a week state.⁴⁰ The bombing of Nagasaki then brings up modern issues of misuse, escalation, and devastating power because the controversy surrounding it makes it seem so unnecessary and had so many negative effects.

Section V: Nagasaki as a Target and the Precedent of Civilian Bombing

The greatest piece of evidence highlighting the revisionist's view of the Nagasaki bombing as unnecessary and connecting it to modern controversy is their examination of Nagasaki as a target. Nagasaki was never viewed as a primary military target and was added back onto the targeting list because they need a second target. and Michael Gordin observes of Nagasaki as a target, "Nagasaki made a poor target: it was irregularly shaped; it was bounded by mountains in a way which would absorb most of the blast, rather than focus it; and it had already been hit, albeit only slightly, in firebombing raids. Nevertheless, the necessity for multiple targets indicated that something had to be added to replace Kyoto, and Nagasaki was the unlucky choice."⁴¹ Revisionists often describe Nagasaki as being unnecessary because it was one of the few cities capable of actually measuring the bombs effects.

Measuring the effects of the bomb had nothing to do with ending the war but was a scientific and military goal for gaining knowledge on the new weapon. Particularly, Nagasaki's effects on the modern nuclear policy reveal how it was the first instance of testing a stronger bombs whatever cost.⁴² The military and scientists needed to accomplish this goal because the Nagasaki "Fat Man" bomb had a significantly more

⁴⁰ Alperovitz, 623.

⁴¹ Gordin, 5.

⁴² Ibin, 43-45.

powerful plutonium core than the uranium one of Hiroshima's "Little Boy" and was the model for future atomic bombs but they had not idea how powerful until tested.⁴³ Minutes of the second Targeting Committee, May 10-11, 1945, list the criteria for selecting a target be that it's a large urban area, it is capable of being damaged effectively by the blast and it is not attacked by August. Additionally the committee considered the psychological effects of the bomb saying, "Two aspects of this are (1) obtaining the greatest psychological effect against Japan and (2) making the initial use sufficiently spectacular for the importance of the weapon to be internationally recognized when publicity on it is released"⁴⁴ Revisionist history is well supported in changing the official narrative from the Nagasaki bombing being necessary to being unnecessary to ending the war because the criteria for selecting targets does not focus on only targets that would cause Japan to surrender. Nagasaki sets a very uncomfortable precedent in live testing of nuclear arms that connects to modern issues of countries testing their own nuclear arms in violation of treaties.

The Nagasaki bombing clearly violates the League of Nations prohibition on aerial bombing of civilians, made illegal in 1938, and stated that bombing targets should have a clearly identifiable military target, and not be bombed in such a way that civilians could be negligently bombed.⁴⁵ Modern nuclear policies as countries like Pakistan, India, Iran, North Korea and others test their own nuclear weapons in violation of nuclear treaties. The modern equivalent of the League of Nations prohibition is the Treaty on the

⁴³ Barton J. Bernstein, "Truman and the A-Bomb: Targeting Noncombatants, Using the Bomb, and His Defending the "Decision"." *The Journal of Military History*. 62 (July 1998): 559

⁴⁴ Target Committee, Los Alamos, May 10-11, 1945. Atomic Bomb: Decision; Documents on the Decision to Use Atomic Bombs on the Cities of Hiroshima and Nagasaki. <http://www.dannen.com/decision/>.

⁴⁵ Protection of Civilian Populations Against Bombing from the Air in Case of War, League of Nations, September 30, 1938. Atomic Bomb: Decision; Documents on the Decision to Use Atomic Bombs on the Cities of Hiroshima and Nagasaki. <http://www.dannen.com/decision/int-law.html#D>.

Non-Proliferation of Nuclear Weapons which is meant to prevent the wide disruption of nuclear technology.⁴⁶ This Treaty was the first of the modern era to specifically designate and recognize nuclear weapons as such a destructive force and specifically control their spread after it came into force in 1970. Yet it is not internationally recognized or followed. This relates to the modern evolution of nuclear weapons as necessary to international power and that nuclear arms can be used or tested in defiance of international treaty, precedents both set by the atomic bombing of Nagasaki.

Revisionist history exposes how the controversy that surrounds the bombing with many, like defiance of international treaty or using nuclear weapons as political tools, reflected in modern policies. One of the gravest precedents set by the adding of Nagasaki to the target list is that it set a precedent that nuclear arms could be used on civilian populations for not other reasons than to test nuclear power and as shock tactics.

The debate on bombing civilian targets would play a profound role specifically in the atomic bombings were it would be sharply contested in the bombing of Nagasaki. As Barton Bernstein, writing in *Truman and the A-Bomb*, delves deeply into the subject of the justification behind using the “special” weapons, he concludes that the use of atomic weapons seemed inevitable, however, controversial and that the choice to use it on noncombatants was not easy or readily accepted but still undertaken.⁴⁷ The choice to use atomic weapons in World War II was justified out of a perceived need to save lives by the Truman administration. The work of revisionists’ historians questions this part of the official narrative as true showing how modern controversies surrounding the use of nuclear weapons against civilians developed.

⁴⁶ Treaty on the Non-Proliferation of Nuclear Weapons.
<http://www.state.gov/www/global/arms/treaties/npt1.html#2>

⁴⁷ Bernstein, (July 1998), 549-51.

The atomic bombing of Nagasaki was the bombing of a largely civilian target for the political shock against Japan and the U.S.S.R. while also providing a way for the military and scientists to measure a test of the new bomb. Nagasaki had no direct military importance.⁴⁸ Nagasaki's wartime importance came from its wide-ranging industrial activity, including the production of ordnance, ships, military equipment, and other war materials. However it lacked an actual military target like the army headquarters and major troops of Hiroshima. The eventual target of the Fat Man bomb would be the Mitsubishi Steel and Arms Works factories. With no clear military target thought the bombing clearly violated international agreements against using aerial bombing of civilian targets. This re-interpretation of the meaning the Nagasaki bomb from necessary to stop the war to necessary to have a demonstration of the bombs power links the evolution of nuclear policies that disregard targeting only military targets. For instance, if the world ever fell into nuclear war, the chain reaction would result in the greatest destruction of civilian areas. In addition, the precedent of targeting civilian areas is reflected in modern terrorist groups' objectives of obtaining nuclear technologies in urban centers. The revisionist re-interpretation of the Nagasaki bomb clearly shows how many moral controversies like modern terrorism or nuclear war on urban centers evolved from the bombing of Nagasaki.

It is the moral controversy surrounding Nagasaki as the nuclear bombing of a civilian target that makes revisionist history so resisted in changing the official narrative of the atomic bombings so difficult. As Bernstein asks in *Truman and the A-bomb*: "Might the bomb have been used truly on a military target and not substantially on noncombatants... Would the 1945 use of the bomb then raise such troubling moral issues

⁴⁸ Gordin, 94-5.

for many in the 1990s?”⁴⁹ Much of the reasoning behind Nagasaki could be excuses, even in most of revisionist history, if Nagasaki carried more military significance like Hiroshima did. At the time of the bombing, a nuclear bomb was just “...a bigger bomb,” with not attachments of modern thinking of “weapons of mass destruction.”⁵⁰ However these modern attachments considered with revisionist theories about the reasons of the bombing of a civilian target hard to accept in an official narrative that emphasis saving lives. Additionally, this focus on the controversy creates direct connections with modern controversies that surround issues like secret nuclear programs and the use of nuclear technology on civilians.

Revisionist history has become so strong in the modern period because of a greater recognition of the special status of nuclear weapons as so devastating to the world. However it still remains difficult to address such a powerful event in human history because it is so morally difficult to reconcile the bombing of civilians or the use of nuclear weapons with no real knowledge of their power. Sadao Asada observes that Japanese society is still unable to, address the nuclear bombings, “Because of a strong sense of nuclear victimization it has been difficult, until very recently, for Japanese scholars to discuss the atomic bombing in the context of ending the Pacific War.”⁵¹ The Japanese population still grapples with the nuclear attacks even today by confronting many issues surrounding victims of the blasts and treatment of disease. Not only did the nuclear bombs leave behind many victims but they are seen as the primary reason that Japan ultimately surrendered. Such a psychological connection between the bombs and national defeat make the subject incredible hard for the Japanese to grapple with in a

⁴⁹ Bernstein (1991), 570

⁵⁰ Kugler, 470-474.

⁵¹ Asada, 481.

public arena.⁵² Only with the weakling of this mentality and the weakening of the social memory of the bombs in American history may revisionist history fully expose how the inconsistencies of the Nagasaki bombing play a great role in the shaping of modern nuclear policies.

Conclusion

Current modern policy emphasizes checks on the power of nuclear weapons, like safeguards, open policies, and control of technology, while still recognizing the important place they have in military power in our international world.⁵³ Further change in how the atomic blasts are celebrated could mean greater change in modern nuclear policies to eliminate the perceived need of nuclear weapons for international power or erase the precedent that nuclear arsenals should be created in secret.

As of 2007 nine countries split and nuclear arsenal of 27,000 nuclear weapons and, while the end of the Cold War significantly reduced the possibility of nuclear war, these uncontrolled arsenals hold a duality of terror and security in today's world.⁵⁴ Not just in the proliferation of nuclear weaponry, but a new and emerging emphasis on alternative nuclear technologies have forced a globalize world to confront how to properly implement such technologies without risking further escalation of nuclear power. As William Walker says of modern attitudes towards nuclear policies in a post Cold War world, "After a period in which so much went wrong, events in the spring and summer of 2000 suggest that a new and more constructive phase of nuclear ordering *could* lie ahead."⁵⁵ Modern thought on nuclear arms emphasis a control, not furthering of

⁵²Ibid .

⁵³Diehl, 75-99.

⁵⁴ Ibin, xi.

⁵⁵ Walker, 723.

nuclear arsenals motivated by conflict and runaway policy as the bombing of Nagasaki was motivated by.

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